ional Application No T/EP 03/11012

A. CLASSIFICATION OF SUBJECT PER IPC 7 B27N1/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) IPC 7 B27N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

WPI Data, PAJ, EPO-Internal

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Х	US 3 969 454 A (THORNBER WILLIAM ET AL) 13 July 1976 (1976-07-13) column 1, line 50 -column 2, line 25; claims; figures; example 2	1-4
A	PATENT ABSTRACTS OF JAPAN vol. 015, no. 452 (M-1180), 18 November 1991 (1991-11-18) & JP 03 193404 A (MATSUSHITA ELECTRIC WORKS LTD), 23 August 1991 (1991-08-23) abstract	
Α	PATENT ABSTRACTS OF JAPAN vol. 010, no. 323 (M-531), 5 November 1986 (1986-11-05) & JP 61 130002 A (KOYO SANGYO KK), 17 June 1986 (1986-06-17) abstract -/	

Further documents are listed in the continuation of box C.	Patent family members are listed in annex.
Special categories of cited documents: A' document defining the general state of the art which is not considered to be of particular relevance E' earlier document but published on or after the international filing date L' document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) O' document referring to an oral disclosure, use, exhibition or other means P' document published prior to the international filing date but later than the priority date claimed	 *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. *&* document member of the same patent family
Date of the actual completion of the international search 19 January 2004 Name and mailing address of the ISA	Date of mailing of the international search report 29/01/2004 Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31–70) 340–2040, Tx. 31 651 epo nl, Fax: (+31–70) 340–3016	J-E. Söderberg

INTERNAL SEARCH REPORT

tional Application No

C.(Continu	etion) DOCUMENTS CO ERED TO BE RELEVANT			
Category °	Citation of document, with indication,where appropriate, of the relevant passages	Relevant to claim No.		
A	DATABASE WPI Section Ch, Week 198109 Derwent Publications Ltd., London, GB; Class A81, AN 1981-14528D XP002267266 & JP 55 164142 A (EIDAI CO LTD), 20 December 1980 (1980-12-20) abstract			
A	US 6 321 804 B1 (MANGOLD CHRISTOPHER) 27 November 2001 (2001-11-27)			
Α	DE 199 13 589 A (SIEMPELKAMP GMBH & CO) 28 September 2000 (2000-09-28)			
•				
• .				
	·	·		
		* 13		
	·			
	·			

INTERNATIONAL SEARCH REPORT

sermation on patent family members

				/EF 03/11012	
Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 3969454	Α	13-07-1976	CA	970267 A1	01-07-1975
JP 03193404	Α	23-08-1991	NONE		
JP 61130002	Α	17-06-1986	NONE		
JP 55164142	А	20-12-1980	NONE		
US 6321804	B1	27-11-2001	US	6412530 B1	02-07-2002
DE 19913589	A	28-09-2000	DE AU DE WO	19913589 A1 4108400 A 10080728 D2 0058089 A1	28-09-2000 16-10-2000 14-02-2002 05-10-2000

tional Application No